

## CLAIM AMENDMENTS

1 through 7 (canceled)

8. (new) A method of diagnosing a colorectal carcinoma in a patient suspected of suffering from colorectal cancer, which comprises the steps of:

(a) obtaining from the patient a biopsy of colorectal tissue, lymph nodes or a sample of body fluid or stool, wherein the colorectal tissue, lymph nodes, body fluid, or stool are free of HERG channels in a patient free of colorectal cancer;

(b) detecting as a selective tumor marker the presence of at least one HERG potassium channel in the biopsy of colorectal tissue, lymph nodes, or in the body fluid or stool; and

(c) relating the presence of HERG potassium channel in the biopsy or sample to colorectal carcinoma in the patient.

9. (New) The method of diagnosing colorectal carcinoma in a patient defined in claim 8, wherein according to step (b) the selective tumor marker is detected by either reverse transcriptase/polymerase chain reaction or through formation of a detectable complex formed between the HERG potassium channel and an antibody thereto

1           10. (new) The method of diagnosing colorectal carcinoma  
2 in a patient defined in claim 8, wherein according to steps (b) and  
3 (c) the presence of HERG potassium channel as a selective tumor  
4 marker is detected by isolating cellular RNA from the biopsy,  
5 treating the isolated cellular RNA with reverse transcriptase to  
6 obtain cDNA, performing reverse transcriptase/polymerase chain  
7 reaction analysis on the cloned DNA to amplify the cDNA and to  
8 detect in the cDNA, a genetic marker for the HERG potassium  
9 channel, and relating the presence of the genetic marker for HERG  
10 potassium channel to colorectal carcinoma in the patient.

1           11. (new) The method of detecting colorectal carcinoma in  
2 a patient defined in claim 8, wherein according to steps (b) and  
3 (c) the presence of HERG potassium channel as a selective tumor  
4 marker is detected by staining a section of the biopsy, incubating  
5 the section of the biopsy with rabbit anti-ERG1 HERG as a primary  
6 HERG antibody, capable of reacting with HERG potassium channel to  
7 form a complex, treating the complex with a visual aid to visualize  
8 the primary HERG antibody, and detecting a homogeneous brown stain  
9 indicating that a reaction occurring between the primary HERG  
10 antibody and the HERG potassium channel in the biopsy to form a  
11 complex, and relating formation of the complex to colorectal  
12 carcinoma in the patient.

1           12. (new) A method of treating colorectal carcinoma in  
2 a patient in need of said treatment, which comprises the step of

3 administering to said patient, a therapeutically effective amount  
4 of 4-[1-(2-(6-methyl-2-pyridinyl)ethyl-4-  
5 piperidinyl)carbonyl]methane-sulfoanilide 2HCl sufficient to treat  
6 the colorectal carcinoma.

1 13. (new) The method of treating colorectal carcinoma in  
2 a patient as defined in claim 12, wherein prior to treating the  
3 patient with a therapeutically effective amount of 4-[1-(2-(6-  
4 methyl-2-pyridinyl)ethyl-4-piperidinyl)carbonyl]methane-  
5 sulfoanilide 2HCl, the following steps are carried out:

6 (a) obtaining from the patient a biopsy of colorectal  
7 tissue, lymph nodes or a sample of body fluid or stool, wherein the  
8 colorectal tissue, lymph nodes, body fluid, or stool are free of  
9 HERG channels in a patient free of colorectal cancer;

10 (b) detecting as a selective tumor marker the presence of  
11 at least one HERG potassium channel in the biopsy of colorectal  
12 tissue, lymph nodes, or in the body fluid or stool; and

13 (c) relating the presence of HERG potassium channel in  
14 the biopsy or sample to colorectal carcinoma in the patient.